

Canadian Journal of Zoology

Contents
Volume 73, 1995

Revue canadienne de zoologie

Sommaire
Volume 73, 1995

January /Janvier

ARTICLES

Patricia A. King, Mary N. Rosholt, and Kenneth B. Storey	Seasonal changes in plasma membrane glucose transporters enhance cryoprotectant distribution in the freeze-tolerant wood frog	1
Liza M. Mazzaro, J. Lawrence Dunn, Harold C. Furr, and Richard M. Clark	Vitamin A plasma kinetics in northern fur seals (<i>Callorhinus ursinus</i>), using vitamin A ₂ as a tracer	10
Daniela Nicastro, Ulrich Smola, and Roland R. Melzer	The antennal sensilla of carnivorous "phantom" larva of <i>Chaoborus crystallinus</i> (De Geer) (Diptera, Nematocera)	15
Christophe Guinet and Jérôme Bouvier	Development of intentional stranding hunting techniques in killer whale (<i>Orcinus orca</i>) calves at Crozet Archipelago	27
Eric P. Hoberg and Lena N. Measures	<i>Anophryocephalus inuitorum</i> sp.nov. and <i>A. arcticensis</i> sp.nov. (Eucestoda: Tetrabothriidae) in ringed seals (<i>Phoca hispida hispida</i>) and harp seals (<i>Phoca groenlandica</i>) from high latitude seas of eastern Canada and the Arctic basin	34
Eric P. Hoberg	Historical biogeography and modes of speciation across high-latitude seas of the Holarctic: concepts for host-parasite coevolution among the Phocini (Phocidae) and Tetrabothriidae (Eucestoda)	45
Marie Novak, Ashok Modha, Jonathan Lee, Richard Buist, and Barry Blackburn	Metabolism of D-[1- ¹³ C]glucose in livers of <i>Meriones unguiculatus</i> infected with <i>Echinococcus multilocularis</i>	58
John P. Hayes, Eric G. Horvath, and Patrick Hounihan	Townsend's chipmunk populations in Douglas-fir plantations and mature forests in the Oregon Coast Range	67
W. Piasecki and B.M. MacKinnon	Life cycle of a sea louse, <i>Caligus elongatus</i> von Nordmann, 1832 (Copepoda, Siphonostomatoida, Caligidae)	74
Thomas M. Haggerty, Jeffrey T. Garner, George H. Patterson, and Lannis C. Jones, Jr.	A quantitative assessment of the reproductive biology of <i>Cyclonaias tuberculata</i> (Bivalvia: Unionidae)	83
Matina C. Kalounis and R. Mark Brigham	Intraspecific variation in wing loading affects habitat use by little brown bats (<i>Myotis lucifugus</i>)	89
Zhi-Qiang Zhang	A cladistic analysis of Trombidiidae (Acari: Parasitengona): congruence of larval and adult character sets	96
Evert E. Lindquist	Remarkable convergence between two taxa of ascid mites (Acari: Mesostigmata) adapted to living in pore tubes of bracket fungi in North America, with description of <i>Mycolaelaps</i> new genus	104
Jose Martin and Pilar López	Influence of habitat structure on the escape tactics of the lizard <i>Psammodromus algirus</i>	129
Michael T. Campbell and Norman A. Slade	The effect of maternal mass on litter size and offspring survival in the hispid cotton rat (<i>Sigmodon hispidus</i>)	133
Gary R. Bortolotti and Joan R. Gabrielson	Fluctuating asymmetry in the skeleton of the American kestrel, <i>Falco sparverius</i> : a test of the consequences of sexual size dimorphism	141
Eric J. Warner and Thomas P. Quinn	Horizontal and vertical movements of telemetered rainbow trout (<i>Oncorhynchus mykiss</i>) in Lake Washington	146
Mark D. Powell, Glenda M. Wright, and David J. Speare	Morphological changes in rainbow trout (<i>Oncorhynchus mykiss</i>) gill epithelia following repeated intermittent exposure to chloramine-T	154
David M. Taylor, Denis H. Lynn, and Scott G. Gransden	<i>Vasichona opiliophila</i> n.sp., an ectosymbiotic ciliate (Chonotrichia; Exogemmidida) on the maxillae of the snow crab, <i>Chionoecetes opilio</i>	166
Janet W. Reid	Redescription of <i>Parastenocaris brevipes</i> Kessler and description of a new species of <i>Parastenocaris</i> (Copepoda: Harpacticoida: Parastenocarididae) from the U.S.A.	173
R.E. Zurbrigg and F.W.H. Beamish	Thy-1 immunoreactivity in the larval sea lamprey (<i>Petromyzon marinus</i> L.), a vertebrate without a definitive thymus	188

NOTES

R.A. DeClerck-Floate and T.A. Steeves	Patterns of leaf and stomatal development explain ovipositional patterns by the gall midge <i>Cystiphora sonchi</i> (Diptera: Cecidomyiidae) on perennial sow-thistle (<i>Sonchus arvensis</i>)	198
---------------------------------------	---	-----

Kenneth B. Storey and David A. Kelly	Glycolysis and energetics in organs of hibernating mice (<i>Zapus hudsonius</i>)	202
Michael H. Martin	Validation of daily growth increments in otoliths of <i>Anguilla rostrata</i> (Lesueur) elvers	208
Instructions to authors		iii
Recommandations aux auteurs		vii
Research Journals Publication Policy		xi
Revues scientifiques politique de publication		xiv

February / Février

ARTICLES

Charles Lydeard, Michael C. Wooten, and Axel Meyer	Cytochrome <i>b</i> sequence variation and a molecular phylogeny of the live-bearing fish genus <i>Gambusia</i> (Cyprinodontiformes: Poeciliidae)	213
Timo Soveri and Mauri Nieminen	Effect of winter on papillar morphology of the rumen in reindeer calves	228
Jacques Castanet et Maria Helena Caetano	Influence du mode de vie sur les caractéristiques pondérales et structurales du squelette chez les amphibiens anoures	234
Terry L. Derting and Edward B. Noakes III	Seasonal changes in gut capacity in the white-footed mouse (<i>Peromyscus leucopus</i>) and meadow vole (<i>Microtus pennsylvanicus</i>)	243
L. Bélanger and J. Bédard	Use of ice-scoured depressions by marsh-foraging snow geese (<i>Chen caerulescens atlantica</i>)	253
James Barry Grand	Nesting success of ducks on the central Yukon Flats, Alaska	260
C. Haldar and Savita Singh	Modulation of ovarian function by various indolamines during the sexually active phase in the Indian palm squirrel, <i>Funambulus pennanti</i>	266
Robert W. Murphy, Viera Kovac, Oliver Haddrath, G. Scott Allen, Alex Fishbein, and Nicholas E. Mandrak	mtDNA gene sequence, allozyme, and morphological uniformity among red diamond rattlesnakes, <i>Crotalus ruber</i> and <i>Crotalus exsul</i>	270
Eve C. Southward, Verena Tunnicliffe, and Michael Black	Revision of the species of <i>Ridgeia</i> from northeast Pacific hydrothermal vents, with a redescription of <i>Ridgeia piscesae</i> Jones (Pogonophora: Obturata = Vestimentifera)	282
C.P. Goater, J.D. Goss-Custard, and C.R. Kennedy	Population dynamics of two species of intestinal helminth in oystercatchers (<i>Haematopus ostralegus</i>)	296
J.E. Cares and J.G. Baldwin	Comparative fine structure of sperm of <i>Heterodera schachtii</i> and <i>Punctodera chalcoensis</i> , with phylogenetic implications for Heteroderinae (Nemata: Heteroderidae)	309
Stephen J. Scribner and Patrick J. Weatherhead	Locomotion and antipredator behaviour in three species of semi-aquatic snakes	321
Nevin Aspinwall and John D. McPhail	Reproductive isolating mechanisms between the peamouth, <i>Mylocheilus caurinus</i> , and the redeye shiner, <i>Richardsonius balteatus</i> , at Stave Lake, British Columbia, Canada	330
Andrew P. Hendry, Frank E. Leonetti, and Thomas P. Quinn	Spatial and temporal isolating mechanisms: the formation of discrete breeding aggregations of sockeye salmon (<i>Oncorhynchus nerka</i>)	339
John T. Beneski, Jr., John H. Larsen, Jr., and Brian T. Miller	Variation in the feeding kinematics of mole salamanders (Ambystomatidae: <i>Ambystoma</i>)	353
J.F. Craig, J.A. Babaluk, S.G. Stevenson, and P.C. Williams	Variation in growth and reproduction of walleye (<i>Stizostedion vitreum</i>) in three Manitoba lakes	367
Gregory D.W. Pommen and Douglas A. Craig	Flow patterns around gills of pupal net-winged midges (Diptera: Blephariceridae): possible implications for respiration	373
Betty McGuire and Lowell L. Getz	Communal nesting in prairie voles (<i>Microtus ochrogaster</i>): an evaluation of costs and benefits based on patterns of dispersal and settlement	383
Robert T. Eberhardt and Mike Riggs	Effects of sex and reproductive status on the diets of breeding Ring-necked Ducks (<i>Aythya collaris</i>) in north-central Minnesota	392

NOTES

Adrian P. Spidle, Edward L. Mills, and Bernie May	Absence of naturally occurring hybridization between the quagga mussel (<i>Dreissena bugensis</i>) and the zebra mussel (<i>D. polymorpha</i>) in the lower Great Lakes	400
J.P.Y. Arnould, I.L. Boyd, and A. Clarke	A simplified method for determining the gross chemical composition of pinniped milk samples	404

March / Mars

ARTICLES

Arthur H. Houston and Ajmal Murad Erythroynamics in fish: recovery of the goldfish <i>Carassius auratus</i> from acute anemia	411
Sabine Schweiger and Stan Boutin The effects of winter food addition on the population dynamics of <i>Clethrionomys rutilus</i>	419
P.J. White, R.A. Garrott, and D.M. Heisey Variability in snow-urine assays	427
Cynthia J. Zabel, Kevin McKelvey, and James P. Ward, Jr. Influence of primary prey on home-range size and habitat-use patterns of northern spotted owls (<i>Strix occidentalis caurina</i>)	433
Dwayne R. Etter, Charles M. Nixon, Joseph B. Sullivan, and Jeanette A. Thomas Emigration and survival of orphaned female deer in Illinois	440
Neil H.C. Fraser, Jan Heggenes, Neil B. Metcalfe, and John E. Thorpe Low summer temperatures cause juvenile Atlantic salmon to become nocturnal	446
Karol A. Worden and Peter J. Pekins Seasonal change in feed intake, body composition, and metabolic rate of white-tailed deer	452
Jane E. Rutherford Patterns of dispersion of aquatic insects colonizing artificial substrates in a southern Ontario stream	458
Mary A. Sewell, Ahmed S. Thandar, and Fu-Shiang Chia A redescription of <i>Leptosynapta clarki</i> Heding (Echinodermata: Holothuroidea) from the northeast Pacific, with notes on changes in spicule form and size with age	469
Christian Lydersen and Kit M. Kovacs Paralysis as a defence response to threatening stimuli in harp seals (<i>Phoca groenlandica</i>)	486
Glenn D. DelGiudice, Mark A. Asleson, Larry W. Varner, and Eric C. Hellgren Twenty-four-hour urinary creatinine and urea nitrogen excretion in male white-tailed deer	493
David L. Strayer, Sarah E. May, Pamela Nielsen, Wilfried Wollheim, and Sharon Hausam An endemic groundwater fauna in unglaciated eastern North America	502
K.A. Sendall, A.R. Fontaine, and D. O'Foighil Tube morphology and activity patterns related to feeding and tube building in the polychaete <i>Mesochaetopterus taylori</i> Potts	509
Robert G. Clark, Daryl E. Meger, and Jordan B. Ignatiuk Removing American crows and duck nesting success	518
Katherine Rails, Brian B. Hatfield, and Donald B. Siniff Foraging patterns of California sea otters as indicated by telemetry	523
Élise Mayrand, Jocelyne Pellerin-Massicotte et Bruno Vincent Effets à court terme de la disponibilité de nourriture, de la température et de la remise en suspension des sédiments sur les indices biochimiques de croissance du <i>Mya arenaria</i> (L.) : une étude en milieu naturel	532
Lisa Kirkendale and Philip Lambert <i>Cucumaria pallida</i> , a new species of sea cucumber from the northeast Pacific Ocean (Echinodermata, Holothuroidea)	542
R.B. Aiken and N. Malatestinic Life history, gonad state, and changes in functional sex ratio in the salt-marsh waterboatman, <i>Trichocorixa verticalis</i> (Fieber) (Heteroptera: Corixidae)	552
Ronald Sluys, Maria Ribas, and Jaume Baguñà Taxonomy, ecology, and karyology of a new species of <i>Phagocata</i> from Spain, with a discussion on the phylogenetic systematics of the genus <i>Phagocata</i> s.l. (Platyhelminthes, Tricladida, Paludicola)	557
Michael F. Wright and Sheldon I. Guttman Lack of an association between heterozygosity and growth rate in the wood frog, <i>Rana sylvatica</i>	569
Raymond K. Nakamura Morphological variation in the Pacific sand dollar <i>Dendraster excentricus</i>	576
C. Swennen and J. Van der Meer Composition of eggs of common eiders	584
Miloslav Zacharda New taxa of Rhagidiidae (Acari: Prostigmata) from North America. Part II. The genera <i>Kouchibouguacia</i> Zacharda and <i>Shibaia</i> Zacharda	589

NOTES

Daniel D. Heath, Robert H. Devlin, Thomas J. Hilbish, and George K. Iwama Multilocus DNA fingerprints in seven species of salmonids	600
H.L. Matanock and I.G. Welsford Contact rehydration in the terrestrial slug <i>Limax maximus</i> L. in the field	607
Peter G. Beninger, Tracy M. Potter, and Sylvie D. St-Jean Paddle cilia fixation artefacts in pallial organs of adult <i>Mytilus edulis</i> and <i>Placoplecten magellanicus</i> (Mollusca, Bivalvia)	610

April / Avril

ARTICLES

Kenneth M. Fry and Douglas A. Craig Larval black fly feeding (Diptera: Simuliidae): use of endogenous glycoconjugates	615
--	-----

Bang Q. Gong and Anthony P. Farrell A method of culturing coronary artery explants for measuring vascular smooth muscle proliferation in rainbow trout	623
Kim G. Poole Spatial organization of a lynx population	632
Kellie L. McGinness, Greta A. Fryxell, and John D. McEachran <i>Pseudonitzschia</i> species found in digestive tracts of northern anchovies (<i>Engraulis mordax</i>)	642
J.G. Baldwin and C.D. Eddleman Buccal capsule of <i>Zeldia punctata</i> (Nemata: Cephalobidae): an ultrastructural study	648
Olga Kukal Winter mortality and the function of larval hibernacula during the 14-year life cycle of an arctic moth, <i>Gynaephora groenlandica</i>	657
Joanne Di Maio and Lynda D. Corkum Relationship between the spatial distribution of freshwater mussels (Bivalvia: Unionidae) and the hydrological variability of rivers	663
Daniel P.M. Stechey and Keith M. Somers Potential, realized, and actual fecundity in the crayfish <i>Orconectes immunis</i> from southwestern Ontario	672
Robert G. Harcourt, Andrew M. Schulman, Lloyd S. Davis, and Fritz Trillmich Summer foraging by lactating female New Zealand fur seals (<i>Arctocephalus forsteri</i>) off Otago Peninsula, New Zealand	678
Laurie J. Vitt, Peter A. Zani, Janalee P. Caldwell, and Edwin O. Carrillo Ecology of the lizard <i>Kentropyx pelviceps</i> (Sauria: Teiidae) in lowland rain forest of Ecuador	691
Bruce N. McLellan and Fred W. Hovey The diet of grizzly bears in the Flathead River drainage of southeastern British Columbia	704
A. Kari Stuart-Smith and Stan Boutin Predation on red squirrels during a snowshoe hare decline	713
Simon J. Childerhouse, Stephen M. Dawson, and Elisabeth Slooten Abundance and seasonal residence of sperm whales at Kaikoura, New Zealand	723
Ana I. Malizia, Roxana R. Zenuto, and Cristina Busch Demographic and reproductive attributes of dispersers in two populations of the subterranean rodent <i>Ctenomys talarum</i> (toco-tuco)	732
C.J. Brauner, C.L. Ballantyne, D.J. Randall, and A.L. Val Air breathing in the armoured catfish (<i>Hoplosternum littorale</i>) as an adaptation to hypoxic, acidic, and hydrogen sulphide rich waters	739
Juan Carlos Guix and Xavier Ruiz Toucans and thrushes as potential dispersers of seed-predatory weevil larvae in southeastern Brazil	745
Mark H. Sherfy and Peter J. Pekins Influence of wind speed on sage grouse metabolism	749
Mario St-Georges, Simon Nadeau, Daniel Lambert, and Robert Décarie Winter habitat use by ptarmigan, snowshoe hares, red foxes, and river otters in the boreal forest — tundra transition zone of western Quebec	755
Thomas H. MacRae and John A. Freeman Organization of the cytoskeleton in brine shrimp setal cells is molt-dependent	765
D.A. Craig, O. Fossati, and Y. Séchan Black flies (Diptera: Simuliidae) of the Marquesas Islands, French Polynesia: redescriptions and new species	775

NOTES

C.M.S. Plowright, R.C. Plowright, and S.L. Reid "Home or away?" The effect of mode of locomotion on consumption of sugar by bumble bees (Hymenoptera: Apidae)	801
A.J. Silliman, M.E. Sorsky, and E.R. Loew The visual pigments of wild white sturgeon (<i>Acipenser transmontanus</i>)	805
Richard A. Liversage and Catherine Tsilfidis Denervation and concomitant amputation of advanced forelimb regenerative outgrowths in adult <i>Xenopus laevis</i>	810
Scott L. Kight Do maternal burrower bugs, <i>Sehirus cinctus</i> Palisot (Heteroptera: Cydnidae), use spatial and chemical cues for egg discrimination	815

May / Mai

ARTICLES

Neal D. Niemuth and Mark S. Boyce Spatial and temporal patterns of predation of simulated sage grouse nests at high and low nest densities: an experimental study	819
N.R. Liley and F.J. Kroon Male dominance, plasma hormone concentrations, and availability of milt in male rainbow trout (<i>Oncorhynchus mykiss</i>)	826
Z. Hassanloo, M.B. Fenton, J.D. DeLaurier, and J.L. Eger Fur increases the parasite drag for flying bats	837
Kit M. Kovacs Mother—pup reunions in harp seals, <i>Phoca groenlandica</i> : cues for the relocation of pups	843
Alastair A. Macdonald, Ian L. Boyd, and Christopher Dixon Comparative anatomy of the cardiac foramen ovale in the Pinnipedia	850
James R. Fotheringham and Laurene Ratcliffe Song degradation and estimation of acoustic distance in Black-capped Chickadees (<i>Parus atricapillus</i>)	858

Raymond McNeil, Oscar Díaz Díaz, Ildefonso Liñero A., and José R. Rodriguez S. Day- and night-time prey availability for waterbirds in a tropical lagoon	869
Michel Thibault and Raymond McNeil Day- and night-time parental investment by incubating Wilson's Plovers in a tropical environment	879
Jouni Taskinen and E. Tellervo Valtonen Age-, size-, and sex-specific infection of <i>Anodonta piscinalis</i> (Bivalvia: Unionidae) with <i>Rhipidocotyle fennica</i> (Digenea: Bucephalidae) and its influence on host reproduction	887
Tom Klepaker Postglacial evolution in lateral plate morphs in Norwegian freshwater populations of the threespine stickleback (<i>Gasterosteus aculeatus</i>)	898
Jean-Marie Bergeron and Louise Jodoin Winter use of food by fenced voles (<i>Microtus pennsylvanicus</i>)	907
P.J. LeBlanc, T.E. Gillis, M.F. Gerrits, and J.S. Ballantyne Metabolic organization of liver and somatic muscle of landlocked sea lamprey, <i>Petromyzon marinus</i> , during the spawning migration	916
Atle Mysterud and Eivind Østbye Bed-site selection by European roe deer (<i>Capreolus capreolus</i>) in southern Norway during winter	924
Miriam H. Richards and Laurence Packer Annual variation in survival and reproduction of the primitively eusocial sweat bee <i>Halictus ligatus</i> (Hymenoptera: Halictidae)	933
Lamar A. Windberg Demography of a high-density coyote population	942
Douglas P. Chivers, Grant E. Brown, and R. Jan F. Smith Familiarity and shoal cohesion in fathead minnows (<i>Pimephales promelas</i>): implications for antipredator behaviour	955
J. Laakkonen, H. Henttonen, T. Soveri, and J. Niemimaa <i>Pneumocystis carinii</i> in arvicoline rodents: seasonal, interspecific, and geographic differences	961
Conrad Vispo and Ian D. Hume The digestive tract and digestive function in the North American porcupine and beaver	967
Damon A. Job, Daryl J. Boness, and John M. Francis Individual variation in nursing vocalizations of Hawaiian monk seal pups, <i>Monachus schauinslandi</i> (Phocidae, Pinnipedia), and lack of maternal recognition	975

NOTES

Maria Pasitschniak-Arts and François Messier Predator identification at simulated waterfowl nests using inconspicuous hair catchers and wax-filled eggs	984
David L. Gummer and R. Mark Brigham Does fluctuating asymmetry reflect the importance of traits in little brown bats (<i>Myotis lucifugus</i>)?	990
John T. Konecki, Carol A Woody, and Thomas P. Quinn Critical thermal maxima of coho salmon (<i>Oncorhynchus kisutch</i>) fry under field and laboratory acclimation regimes	993
J.-P. Nénon, G. Boivin, J. Le Lannic, and J. van Baaren Functional morphology of the mymariform and sacciform larvae of the egg parasitoid <i>Anaphes victus</i> Huber (Hymenoptera: Mymaridae)	996
T. Rogers and M.M. Bryden Predation of Adélie penguins (<i>Pygoscelis adeliae</i>) by leopard seals (<i>Hydrurga leptonyx</i>) in Prydz Bay, Antarctica	1001

June / Juin

ARTICLES

Kevin L. Teather and Patrick J. Weatherhead The influence of age and access to females on dominance in captive male brown-headed cowbirds (<i>Molothrus ater</i>)	1012
Nicolaas A.M. Verbeek Body temperature and growth of nestling Northwestern Crows, <i>Corvus caurinus</i>	1019
Arne C. Nilssen and Rolf E. Haugerud Epizootiology of the reindeer nose bot fly, <i>Cephenemyia trompe</i> (Modeer) (Diptera: Oestridae), in reindeer, <i>Rangifer tarandus</i> (L.), in Norway	1024
Hanne Strager Pod-specific call repertoires and compound calls of killer whales, <i>Orcinus orca</i> Linnaeus, 1758, in the waters of northern Norway	1037
Mark E. Siddall and Eugene M. Burreson Phylogeny of the Euhirudinea: Independent evolution of blood feeding by leeches?	1048
Jose Martín, Pilar López, Luis M. Carrascal, and Alfredo Salvador Adjustment of basking postures in the high-altitude Iberian rock lizard (<i>Lacerta monticola</i>)	1065
Michael E. Nelson Winter range arrival and departure of white-tailed deer in northeastern Minnesota	1069
Lorenzo Alibardi Histogenesis of fat tissue in the regenerating tail of the lizard (<i>Lampropolis</i> spp.)	1077
Jukka Jokela and Pia Mutikainen Effect of size-dependent muskrat (<i>Ondatra zibethica</i>) predation on the spatial distribution of a freshwater clam, <i>Anodonta piscinalis</i> Nilsson (Unionidae, Bivalvia)	1085
Anetta Borkowska Seasonal changes in gut morphology of the striped field mouse (<i>Apodemus agrarius</i>)	1095

Benoni H. Seghers and Anne E. Magurran	Population differences in the schooling behaviour of the Trinidad guppy, <i>Poecilia reticulata</i> : adaptation or constraint?	1100
Walter J. Jakubas, Christopher G. Guglielmo, Conrad Vispo, and William H. Karasov	Sodium balance in ruffed grouse as influenced by sodium levels and plant secondary metabolites in quaking aspen	1106
Karl W. Larsen and Stan Boutin	Exploring territory quality in the North American red squirrel through removal experiments	1115
John W. Zimmerman and Roger A. Powell	Radiotelemetry error: location error method compared with error polygons and confidence ellipses	1123
A.S. Frankel, C.W. Clark, L.M. Herman, and C.M. Gabriele	Spatial distribution, habitat utilization, and social interactions of humpback whales, <i>Megaptera novaeangliae</i> , off Hawai'i, determined using acoustic and visual techniques	1134
Gregory M. Andraso and James N. Barron	Evidence for a trade-off between defensive morphology and startle-response performance in the brook stickleback (<i>Culaea inconstans</i>)	1147
Daniel Sol and Joan Carles Senar	Urban pigeon populations: stability, home range, and the effect of removing individuals	1154
Daniel H. Monson and Anthony R. DeGange	Reproduction, preweaning survival, and survival of adult sea otters at Kodiak Island, Alaska	1161
Pierre Laurent, J.N. Maina, Harold L. Bergman, Annie Narahara, Patrick J. Walsh, and Chris M. Wood	Gill structure of a fish from an alkaline lake: effect of short-term exposure to neutral conditions	1170

NOTES

Olin E. Rhodes Jr., Loren M. Smith, and Ronald K. Chesser	Apportionment of genetic variance in migrating and wintering mallards	1182
W.G. Gilmartin and L.L. Eberhardt	Status of the Hawaiian monk seal (<i>Monachus schauinslandi</i>) population	1185

July / Juillet

ARTICLES

Vladimíra Hanzelová, Viliam Šnábel, Marta Špakulová, Ivica Králová, and Hans-Peter Fagerholm	A comparative study of the fish parasites <i>Proteocephalus exiguus</i> and <i>P. percae</i> (Cestoda: Proteocephalidae): morphology, isoenzymes, and karyotype	1191
E. Yoshida-Shaul and D.A. Chant	The identity of <i>Phytoseius macropilis</i> (Banks) (Acari: Phytoseiidae), with a note on its distribution	1199
Anne-Marie Murray and William H. Cade	Differences in age structure among field cricket populations (Orthoptera: Gryllidae): possible influence of a six-biased parasitoid	1207
V. Flari and M. Lazaridou-Dimitriadou	The impact of nocturnal light pulses on the activity pattern of terrestrial snails (<i>Helix lucorum</i>) entrained to a photoperiod of 12 h light : 12 h dark	1214
S.G. Reeks, L. Boudreau, P. Hardie, and R.A. Cunjak	Diel activity patterns of lake chubs and other fishes in a temperate stream	1221
Arne C. Nilssen and John R. Anderson	Flight capacity of the reindeer warble fly, <i>Hypoderma tarandi</i> (L.), and the reindeer nose bot fly, <i>Cephenemyia trompe</i> (Modeer) (Diptera: Oestridae)	1228
Gérard Hostache, Michel Pascal et Christian Tessier	Influence de la température d'incubation sur le rapport mâle : femelle chez l'atipa, <i>Hoplosternum littorale</i> Hancock (1828)	1239
Miloslav Zacharda	New taxa of Rhagidiidae (Acari: Prostigmata) from North America. Part IIIA. Genus <i>Rhagidia</i> Thorell: the <i>gigas</i> species-group	1247
Miloslav Zacharda	New taxa of Rhagidiidae (Acari: Prostigmata) from North America. Part IIIB. Genus <i>Rhagidia</i> Thorell: the <i>quad risolenidiata</i> species-group	1259
Carole Bradbury, John M. Green, and Michael Bruce-Lockhart	Home ranges of female cunners, <i>Tautogolabrus adspersus</i> (Labridae), as determined by ultrasonic telemetry	1268
Didier Julien-Laferrière	Use of space by the woolly opossum <i>Caluromys philander</i> (Marsupialia, Didelphidae) in French Guiana	1280
Peter J. Corkeron	Humpback whales (<i>Megaptera novaeangliae</i>) in Hervey Bay, Queensland: behaviour and responses to whale-watching vessels	1290
Robin W. Baird and Lawrence M. Dill	Occurrence and behaviour of transient killer whales: seasonal and pod-specific variability, foraging behaviour, and prey handling	1300
S.C. Amstrup and G.M. Durner	Survival rates of radio-collared female polar bears and their dependent young	1312
Sylvain R. Poirier, Manfred E. Rau, and Xiaohui Wang	Diel locomotory activity of deer mice (<i>Peromyscus maniculatus</i>) infected with <i>Trichinella nativa</i> or <i>Trichinella pseudospiralis</i>	1323
N.A. Moltschanowskyj	Changes in shape associated with growth in the loliginid squid <i>Photololigo</i> sp.: a morphometric approach	1335

- Mads C. Forchhammer** Sex, age, and seasonal variation in the foraging dynamics of muskoxen, *Ovibos moschatus*, in Greenland 1344
Karen Ann Ballard and Kit M. Kovacs The acoustic repertoire of hooded seals (*Cystophora cristata*) 1362

NOTES

- Martha J. Desmond, Julie A. Savidge, and Thomas F. Seibert** Spatial patterns of burrowing owl (*Speotyto cunicularia*) nests within black-tailed prairie dog (*Cynomys ludovicianus*) towns 1375
Louis A. Magnarelli, Thomas N. Mather, and Min-Tsung Yeh Hemocytic rickettsia-like organisms in *Ixodes scapularis*: transovarial and transstadial transmission 1380
Michael W. Oehler, Sr., Jonathan A. Jenks, and R. Terry Bowyer Antler rubs by white-tailed deer: the importance of trees in a prairie environment 1383

August / Août

ARTICLES

- Marco Cucco and Giorgio Malacarne** Increase of parental effort in experimentally enlarged broods of Pallid Swifts 1387
Mary L. Reid and Bernard D. Roitberg Effects of body size on investment in individual broods by male pine engravers (Coleoptera: Scolytidae) 1396
L.N. Measures, P. Béland, D. Martineau, and S. De Guise Helminths of an endangered population of belugas, *Delphinapterus leucas*, in the St. Lawrence estuary, Canada 1402
Nicholas W. Calderone Temporal division of labor in the honey bee, *Apis mellifera*: A developmental process or the result of environmental influences? 1410
Jim Schieck, Marie Nietfeld, and J. Brad Stelfox Differences in bird species richness and abundance among three successional stages of aspen-dominated boreal forests 1417
G.B. Sekgororoane and T.G. Dilworth Relative abundance, richness, and diversity of small mammals at induced forest edges 1432
Patricia A. Wisenden and Robert C. Bailey Development of macroinvertebrate community structure associated with zebra mussel (*Dreissena polymorpha*) colonization of artificial substrates 1438
Hugo Ochoa Acuña and John M. Francis Spring and summer prey of the Juan Fernández fur seal, *Arctocephalus philippii* 1444
J.W. Fleeger, T.C. Shirley, and J.N. McCall Fine-scale vertical profiles of meiofauna in muddy subtidal sediments 1453
Mauro Fasola and Nicola Saino Sex-biased parental-care allocation in three tern species (Laridae, Aves) 1461
L.J. Shirose and R.J. Brooks Growth rate and age at maturity in syntopic populations of *Rana clamitans* and *Rana septentrionalis* in central Ontario 1468
Brock R. McMillan and Donald W. Kaufman Travel path characteristics for free-living white-footed mice (*Peromyscus leucopus*) 1474
F.H. Bronson and M.C. Kerbeshian Reactions of reproductively photoresponsive versus unresponsive meadow voles to simulated winter conditions 1479
Roger A. Byrne, Mark L. Burleson, Neal J. Smatresk, and Robert F. McMahon Respiratory and acid-base consequences of zebra mussel infestation on the valves of unionids 1489
M. de Jong-Westman, B.E. March, and T.H. Carefoot The effect of different nutrient formulations in artificial diets on gonad growth in the sea urchin *Strongylocentrotus droebachiensis* 1495
Lui Marinelli and François Messier Parental-care strategies among muskrats in a female-biased population 1503
Emmanuel Paradis and Henri Croset Assessment of habitat quality in the Mediterranean pine vole (*Microtus duodecimcostatus*) by the study of survival rates 1511
David J. Slip The diet of southern elephant seals (*Mirounga leonina*) from Heard Island 1519
Howard H. Whiteman, Richard D. Howard, and Kathleen A. Witten Effects of pH on embryo tolerance and adult behavior in the tiger salamander, *Ambystoma tigrinum tigrinum* 1529
Brian G. Walker and Peter L. Boveng Effects of time-depth recorders on maternal foraging and attendance behavior of Antarctic fur seals (*Arctocephalus gazella*) 1538
D. Dudley Williams, Laura G. Ambrose, and Laura N. Browning Trophic dynamics of two sympatric species of riparian spider (Araneae: Tetragnathidae) 1545
Andrej V. Adrianov The first description of kinorhynchs from the Spitsbergen Archipelago (Greenland Sea), with a key to the genus *Pycnophyes* (Homalorhagida, Kinorhyncha) 1554
Corey J.A. Bradshaw, Darryl M. Hebert, A. Blair Rippin, and Stan Boutin Winter peatland habitat selection by woodland caribou in northeastern Alberta 1567

NOTES

Hannu Pöysä Factors affecting abandonment and adoption of young in common eiders and other waterfowl: a comment	1575
Jan Ove Bustnes and Kjell Einar Erikstad Brood abandonment in common eiders: a reply to H. Pöysä	1577

September / Septembre

ARTICLES

Gregory J. Robertson Annual variation in common eider egg size: effects of temperature, clutch size, laying date, and laying sequence	1579
Javier Alba-Tercedor and John Flanagan Two new Canadian species of the genus <i>Tricorythodes</i> Ulmer, with additional studies on other North American species (Insecta, Ephemeroptera: Leptohyphidae)	1588
Shannon Gowans and Hal Whitehead Distribution and habitat partitioning by small odontocetes in the Gully, a submarine canyon on the Scotian Shelf	1599
S.L. Monfort, J.L. Brown, T.C. Wood, M. Bush, L.R. Williamson, and D.E. Wildt Effects of long-term continuous GnRH administration on the pituitary-gonadal axis in Eld's deer stags (<i>Cervus eldi thamin</i>)	1609
Jean Huot, Marie-Lazarine Poule, and Michel Crête Evaluation of several indices for assessment of coyote (<i>Canis latrans</i>) body composition	1620
Marie-Lazarine Poule, Michel Crête, and Jean Huot Seasonal variation in body mass and composition of eastern coyotes	1625
F. Thomas, A. Lambert, T. De Meeùs, F. Cézilly, and F. Renaud Influence of <i>Microphallus hoffmanni</i> (Trematoda, Microphallidae) on the survival, sexual selection, and fecundity of <i>Gammarus aequicauda</i> (Amphipoda)	1634
Mark R. Taylor, Stephen T. Moss, and Mike Ladle Scanning electron microscopy of the digestive tract of larval <i>Simulium ornatum</i> Meigen (Complex) (Diptera: Simuliidae) and its associated microbial flora	1640
C. Ballan-Dufraîs, A.Y. Jeantet et M. Truchet La formation des spicules de Didemnidae (Asciidae)	1647
Andrew E. Derocher and Ian Stirling Temporal variation in reproduction and body mass of polar bears in western Hudson Bay	1657
Charles C. Lambert, Ilsa M. Lambert, and Gretchen Lambert Brooding strategies in solitary ascidians: <i>Corella</i> species from north and south temperate waters	1666
Rangathilakam Krishnaraj and Gordon Pritchard The influence of larval size, temperature, and components of the functional response to prey density on growth rates of the dragonflies <i>Leistes disjunctus</i> and <i>Coenagrion resolutum</i> (Insecta: Odonata)	1672
John E. Keen, Sumi Aota, Richard W. Brill, Anthony P. Farrell, and David J. Randall Cholinergic and adrenergic regulation of heart rate and ventral aortic pressure in two species of tropical tunas, <i>Katsuwonus pelamis</i> and <i>Thunnus albacares</i>	1681
Lisa Volgenau, Scott D. Kraus, and John Lien The impact of entanglements on two substocks of the western North Atlantic humpback whale, <i>Megaptera novaeangliae</i>	1689
Edward B. Reed and Nancy E. McIntyre <i>Cyclops strenuus</i> (Fischer, 1851) sensu lato in Alaska and Canada, with new records of occurrence	1699
Gustavo A. Lovrich, Bernard Sainte-Marie, and Barry D. Smith Depth distribution and seasonal movements of <i>Chionoecetes opilio</i> (Brachyura: Majidae) in Baie Sainte-Marguerite, Gulf of Saint Lawrence	1712
Kathryn A. Coates Widespread polyploid forms of <i>Lumbricillus lineatus</i> (Müller) (Enchytraeidae: Oligochaeta): comments on polyploidism in the enchytraeids	1727
Luis Medrano-González, Anelio Aguayo-Lobo, Jorge Urbán-Ramirez, and Charles Scott Baker Diversity and distribution of mitochondrial DNA lineages among humpback whales, <i>Megaptera novaeangliae</i> , in the Mexican Pacific Ocean	1735
Daniel Courtois, Raymond Leclair jr., Sylvain Lacasse et Pierre Magnan Habitats préférentiels d'amphibiens ranidés dans des lacs oligotrophes du Bouclier laurentien, Québec	1744
Konstantin E. Mikhailov Eggshell structure in the Shoebill and pelecaniform birds: comparison with Hamerkop, herons, ibises, and storks	1754

NOTES

John W. Kasbohm, Michael R. Vaughan, and James G. Kraus Food habits and nutrition of black bears during a gypsy moth infestation	1771
Christopher W. McKinsey and J. Daniel McLaughlin Erratum: Transmission of <i>Cyclocoelum mutabile</i> (Digenea) to snails: the influence of temperature on the egg and miracidium	1776

October / Octobre

ARTICLES

A.R. Clarke and G.H. Walter "Strains" and the classical biological control of insect pests	1777
Carmen M. Salsbury and Kenneth B. Armitage Reproductive energetics of adult male yellow-bellied marmots (<i>Marmota flaviventris</i>)	1791
Juha Merilä, Mats Björklund, and Gordon F. Bennett Geographic and individual variation in haematozoan infections in the greenfinch, <i>Carduelis chloris</i>	1798
John W. Lawson, Garry B. Stenson, and Dave G. McKinnon Diet of harp seals (<i>Phoca groenlandica</i>) in nearshore waters of the northwest Atlantic during 1990–1993	1805
Jan O. Murie Mating behavior of Columbian ground squirrels. I. Multiple mating by females and multiple paternity	1819
Jean-François Robitaille and Michel Raymond Spacing patterns of ermine, <i>Mustela erminea</i> L., in a Quebec agrosystem	1827
André Martel, Teresa M. Hynes, and John Buckland-Nicks Prodissococonch morphology, planktonic shell growth, and size at metamorphosis in <i>Dreissena polymorpha</i>	1835
Shigeru Nakano Competitive interactions for foraging microhabitats in a size-structured interspecific dominance hierarchy of two sympatric stream salmonids in a natural habitat	1845
Gina Schalk and R. Mark Brigham Prey selection by insectivorous bats: are essential fatty acids important?	1855
Jean-Claude DesLandes, Sylvie Guénette, Yves Prairie, Dominique Roy, Richard Verdon, and Réjean Fortin Changes in fish populations affected by the construction of the La Grande complex (Phase I), James Bay region, Quebec	1860
Leonard J. Shirose and Ronald J. Brooks Age structure, mortality, and longevity in syntopic populations of three species of ranid frogs in central Ontario	1878
Laura C. Groeskorth Nest-site selection by the Swainson's Hawk on the Regina plain, Saskatchewan	1887
Sara E.M. Bloomer, Thomas Willebrand, Ingegerd M. Keith, and Lloyd B. Keith Impact of helminth parasitism on a snowshoe hare population in central Wisconsin: a field experiment	1891
A.P. Farrell and J.A. Johansen Vasoactivity of the coronary artery of rainbow trout, steelhead trout, and dogfish: lack of support for non-prostanoid endothelium-derived relaxation factors	1899
Carlos F. Greco and Peter G. Kevan Patch choice in the anthophilous ambush predator <i>Phymata americana</i> : improvement by switching hunting sites as part of the initial choice	1912
Laurie J. Vitt, Peter A. Zani, and Richard D. Durtsche Ecology of the lizard <i>Norops oxylophus</i> (Polychrotidae) in lowland forest of southeastern Nicaragua	1918
Michael G. Sams, Robert L. Lochmiller, Eric C. Hellgren, Mark E. Payton, and Larry W. Varner Physiological responses of neonatal white-tailed deer reflective of maternal dietary protein intake	1928
Leena Blomstedt Pelage cycle and hair bundle structure in the young and adult ferret, <i>Mustela putorius</i>	1937
Kevin D.E. Stokesbury and John H. Himmelman Examination of orientation of the giant scallop, <i>Placopecten magellanicus</i> , in natural habitats	1945
Charles H. Jagoe and Dave A. Welter Quantitative comparisons of the morphology and ultrastructure of erythrocyte nuclei from seven freshwater fish species	1951
Jean-Steve Meia and Jean-Marc Weber Home ranges and movements of red foxes in central Europe: stability despite environmental changes	1960
Concepción L. Alados, Juan Escós, and John M. Emlen Fluctuating asymmetry and fractal dimension of the sagittal suture as indicators of inbreeding depression in dama and dorcas gazelles	1967

November / Novembre

ARTICLES

Rodolfo Werner and Claudio Campagna Diving behaviour of lactating southern sea lions (<i>Otaria flavescens</i>) in Patagonia	1975
R. Marcel Reeves The genus <i>Odontocephalus</i> (Acari: Orbatida: Carabodiidae) in North America, with description of a new species	1983
Gregor Gilpin Beck and Thomas G. Smith Distribution of blubber in the northwest Atlantic harp seal, <i>Phoca groenlandica</i>	1991
Ole Kristian Berg, Chris J. Foote, and Thomas P. Quinn Fish age, nematode (<i>Philonema oncorhynchi</i>) infection, and development of sexual dimorphism by the adult male sockeye salmon, <i>Oncorhynchus nerka</i> , in western Alaska	1999

Luis M. Carrascal, Eulalia Moreno, and Ingrid M. Mozetich	Ecological plasticity of morphological design: an experimental analysis with tit species	2005
Heather C. Proctor, Robert L. Baker, and Darryl T. Gwynne	Mating behaviour and spermatophore morphology: a comparative test of the female-choice hypothesis	2010
J.Z. Adamczewski, P.F. Flood, and A. Gunn	Body composition of muskoxen (<i>Ovibos moschatus</i>) and its estimation from condition index and mass measurements	2021
Rik L. de Swart, Peter S. Ross, Lies J. Vedder, Fons B.T.J. Boink, Peter J.H. Reijnders, Paul G.H. Mulder, and Albert D.M.E. Osterhaus	Haematology and clinical chemistry values for harbour seals (<i>Phoca vitulina</i>) fed environmentally contaminated herring remain within normal ranges	2035
Barry E. Bendell and Donald K. McNicol	The diet of insectivorous ducklings and the acidification of small Ontario lakes	2044
Robert J. Gegear and Terence M. Laverty	Effect of flower complexity on relearning flower-handling skills in bumble bees	2052
Ian D. Thompson and William J. Curran	Habitat suitability for marten of second-growth balsam fir forests in Newfoundland	2059
Marie-Claude Bel, Christelle Porteret, and Jacques Coulon	Scent deposition by cheek rubbing in the alpine marmot (<i>Marmota marmota</i>) in the French Alps	2065
David J. Mattson and Daniel P. Reinhart	Influences of cutthroat trout (<i>Oncorhynchus clarki</i>) on behaviour and reproduction of Yellowstone grizzly bears (<i>Ursus arctos</i>), 1975–1989	2072
Marja de Jong-Westman, Pei-Yuan Qian, Beryl E. March, and Thomas H. Carefoot	Artificial diets in sea urchin culture: effects of dietary protein level and other additives on egg quality, larval morphometrics, and larval survival in the green sea urchin, <i>Strongylocentrotus droebachiensis</i>	2080
Vanessa Lewis-Winokur and Robert M. Winokur	Incubation temperature affects sexual differentiation, incubation time, and posthatching survival in desert tortoises (<i>Gopherus agassizii</i>)	2091
B. Forrest Sheperd and Robert K. Swihart	Spatial dynamics of fox squirrels (<i>Sciurus niger</i>) in fragmented landscapes	2098
R. Dietz and M.P. Heide-Jørgensen	Movements and swimming speed of narwhals, <i>Monodon monoceros</i> , equipped with satellite transmitters in Melville Bay, northwest Greenland	2106
M.P. Heide-Jørgensen and R. Dietz	Some characteristics of narwhal, <i>Monodon monoceros</i> , diving behaviour in Baffin Bay	2120
Richard R. Buech	Sex differences in behavior of beavers living in near-boreal lake habitat	2133
Michel Mouze et Constant Bagnolini	Le vol en tandem chez le vautour fauve (<i>Gyps fulvus</i>)	2144

NOTES

Rees Kassen, Dolph Schluter, and John Donald McPhail	Evolutionary history of threespine sticklebacks (<i>Gasterosteus</i> spp.) in British Columbia: insights from a physiological clock	2154
Michael J. Doughty, Stavros Petrou, and Heather Macmillan	Anatomy and morphology of the cornea of bovine eyes from a slaughterhouse	2159
Alan S. Kolok and James T. Oris	The relationship between specific growth rate and swimming performance in male fathead minnows (<i>Pimephales promelas</i>)	2165
Peter J. Marchand	Comment: Why do beavers exhibit free-running activity rhythms in winter?	2167
S.C. Amstrup, G.W. Garner, M.A. Cronin, and J.C. Patton	Erratum: Sex identification of polar bears from blood and tissue samples	2169

December / Décembre

ARTICLES

Robin E. Jung and Charles H. Jagoe	Effects of low pH and aluminum on body size, swimming performance, and susceptibility to predation of green tree frog (<i>Hyla cinerea</i>) tadpoles	2171
Julio A. Lemos-Espinal and Royce E. Ballinger	Comparative thermal ecology of the high-altitude lizard <i>Sceloporus grammicus</i> on the eastern slope of the Iztaccíhuatl Volcano, Puebla, Mexico	2184
Ronald W. Davies, R.N. Singhal, and D.D. Wicklund	Changes in reproductive potential of the leech <i>Nepheleopsis obscura</i> (Erpobdellidae) as biomarkers for cadmium stress	2192
John M. Basey and Stephen H. Jenkins	Influences of predation risk and energy maximization on food selection by beavers (<i>Castor canadensis</i>)	2197
Mark V. Abrahams	The interaction between antipredator behaviour and antipredator morphology: experiments with fathead minnows and brook sticklebacks	2209
Sean D. Farley and Charles T. Robbins	Lactation, hibernation, and mass dynamics of American black bears and grizzly bears	2216

David G. Lonzarich and Thomas P. Quinn	Experimental evidence for the effect of water depth and structure on the distribution, growth, and survival of stream fishes	2223
Nicholas F.G. Folkard and James N.M. Smith	Evidence for bottom-up effects in the boreal forest: Do passerine birds respond to large-scale experimental fertilization?	2231
Robert Serrouya, Anthony Ricciardi, and Fred G. Whoriskey	Predation on zebra mussels (<i>Dreissena polymorpha</i>) by captive-reared map turtles (<i>Graptemys geographica</i>)	2238
André Martel	Demography and growth of the exotic zebra mussel (<i>Dreissena polymorpha</i>) in the Rideau River (Ontario)	2244
Mickey E. Heitmeyer	Influences of age, body condition, and structural size on mate selection by dabbling ducks	2251
M.N. Fernandes and S.A. Perna	Internal morphology of the gill of a loricariid fish, <i>Hypostomus plecostomus</i> : arterio-arterial vasculature and muscle organization	2259
E.P. Hoberg, L. Polley, A. Gunn, and J.S. Nishi	<i>Umingmakstrongylus pallikuukensis</i> gen.nov. et sp.nov. (Nematoda: Protostrongylidae) from muskoxen, <i>Ovibus moschatus</i> , in the central Canadian Arctic, with comments on biology and biogeography	2266
Joel W. Martin and Jennifer C. Christiansen	A morphological comparison of the phyllopodous thoracic limbs of a leptostracan (<i>Nebalia</i> sp.) and a spinicaudate conchostracean (<i>Leptesheria</i> sp.), with comments on the use of Phyllopoda as a taxonomic category	2283
Karen P. Grant and Lawrence E. Licht	Effects of ultraviolet radiation on life-history stages of anurans from Ontario, Canada	2292
Keith A. Christian and Gavin S. Bedford	Physiological consequences of filarial parasites in the frillneck lizard, <i>Chlamydosaurus kingii</i> , in northern Australia	2302
Marc Olivier, Gaston Desrosiers, Alain Caron, Christian Retière et Aline Caillou	Réponses comportementales de polychètes <i>Nereis diversicolor</i> (O.F. Müller) et <i>Nereis virens</i> (Sars) aux stimuli d'ordre alimentaire : utilisation de la matière organique particulière (algues et halophytes)	2307
Werner Arens	Structure and evolution of spiracular gills in pupae of net-winged midges (Nematocera; Blephariceridae). Part I. <i>Paulianina</i> and <i>Edwardsina</i> (subfamily Edwardsininae)	2318
I. Ribera and A.N. Nilsson	Morphometric patterns among diving beetles (Coleoptera: Noteridae, Hygrobiidae, and Dytiscidae)	2343
L. Nonnotte, G. Boeuf, and G. Nonnotte	The role of growth hormone in the adaptability of Atlantic salmon (<i>Salmo salar</i> L.) to seawater: effects on the morphology of the mucosa of the middle intestine	2361

NOTE

Narcisse Giani, Patrick Martin, and Jacques Juget	A new species of Phreodrilidae (Oligochaeta), <i>Astacopsisdrilus naceri</i> sp.nov., from Morocco (North Africa), with notes on the biogeography of the family	2375
--	---	------

Author index for Volume 73

AI-1

Index des auteurs pour le volume 73

AI-1

Contents for Volume 73

C-1

Sommaire pour le volume 73

C-1